

Attorney Docket No. 02887.0131-01000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:  
Yoshihiro KIKUCHI et al.

**PRIOR APPLN.:**

Rule 53(b) Divisional Application of:  
Serial No. 09/142,871, filed  
September 16, 1998

Group Art Unit: 2133  
Examiner: S. Baker

Serial No.: NEW

Group Art Unit: Not yet assigned

Filed: December 11, 2001

Examiner: Not yet assigned

For: CODING SYSTEM AND  
DECODING SYSTEM  
Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

**PRELIMINARY AMENDMENT**

Prior to the examination of the above application, please amend this application as follows:

**IN THE CLAIMS:**

Please substitute amended claims 16-17 and 32 for the pending claims having the same number, and add new claims 33-43 as follows. A marked-up version of the amended claims is contained in the attached Appendix.

16. (Amended) A decoding system comprising:

synchronization code detecting means for detecting a synchronization code at one of a plurality of synchronization code inserting positions predetermined at periodic intervals in an input code string;

demultiplexing means for demultiplexing said input code string on the basis of the position of the synchronization code detected by said synchronization code detecting means, to produce kinds of compressed codes; and

decoding means for decoding said compressed codes to output a reconstructed signal, each of the kinds of compressed codes being a variable length code.

17. (Amended) A decoding system as set forth in claim 16, which further comprises code string transforming means for transforming a code string other than said synchronization code, which is transformed so that a Hamming distance from said synchronization code is equal to or greater than a predetermined value at said one of the plurality of synchronization code inserting positions of said input code string, into an original code string.

32. (Amended) A decoding system as set forth in claim 31, which further comprises code string transforming means for transforming a code string other than said synchronization code so that a Hamming distance of the transformed code string from a synchronization code which has a shortest length of synchronization codes having different lengths in a part or all of added layers, is equal to or greater than a predetermined value.

33. (New) A decoding system as set forth in claim 16, wherein said one of the plurality of synchronization code inserting positions depends on a code length of each of the kinds of compressed codes.

34. (New) A decoding system comprising:

a synchronization code detector configured to detect a synchronization code at one of a plurality of synchronization code inserting positions predetermined at periodic intervals in an input code string;

a demultiplexer configured to demultiplex said input code string on the basis of the position of the synchronization code detected by said synchronization code detector, to produce kinds of compressed codes; and

a decoder configured to decode said compressed codes to output a reconstructed signal, each of the kinds of compressed codes being a variable length code.

35. (New) A decoding system as set forth in claim 34, which further comprises a code string transformer configured to transform a code string other than said synchronization code, which is transformed so that a Hamming distance from said synchronization code is equal to or greater than a predetermined value at said one of the plurality of synchronization code inserting positions of said input code string, into an original code string.

36. (New) A decoding system as set forth in claim 34, wherein said input code string comprises a multiplexed code string, which is multiplexed for each of a plurality of layers, a synchronization code being added to at least a part of said plurality of layers.

37. (New) A decoding system as set forth in claim 36, which further comprises a code string transformer configured to transform a code string other than said synchronization code so that a Hamming distance of the transformed code string from a synchronization code which has a shortest length of synchronization codes having different lengths in a part or all of added layers, is equal to or greater than a predetermined value.

38. (New) A decoding system as set forth in claim 34, wherein said one of the plurality of synchronization code inserting positions depends on a code length of each of the kinds of compressed codes.

39. (New) A decoding method comprising:  
detecting a synchronization code at one of a plurality of synchronization code inserting positions predetermined at periodic intervals in an input code string;  
demultiplexing said input code string on the basis of the position of the synchronization code detected by said synchronization code detector, to produce kinds of compressed codes; and  
decoding said compressed codes to output a reconstructed signal, each of the kinds of compressed codes being a variable length code.

40. (New) A decoding method as set forth in claim 39, which further comprises transforming a code string other than said synchronization code, which is transformed so that a Hamming distance from said synchronization code is equal to or

greater than a predetermined value at said one of the plurality of synchronization code inserting positions of said input code string, into an original code string.

41. (New) A decoding method as set forth in claim 39, wherein said input code string comprises a multiplexed code string, which is multiplexed for each of a plurality of layers, a synchronization code being added to at least a part of said plurality of layers.

42. (New) A decoding method as set forth in claim 41, which further comprises transforming a code string other than said synchronization code so that a Hamming distance of the transformed code string from a synchronization code which has a shortest length of synchronization codes having different lengths in a part or all of added layers, is equal to or greater than a predetermined value.

43. (New) A decoding method as set forth in claim 39, wherein said one of the plurality of synchronization code inserting positions depends on a code length of each of the kinds of compressed codes.

#### **REMARKS**

With entry of this Preliminary Amendment, claims 16-17 and 31-43 are pending in this application.

Claims 16-17 and 32 have been amended and new claim 33 has been added to appropriately claim the invention. New claims 34-38 include similar limitations to those of claims 16-17 and 31-33. New claims 39-43 also include similar languages to those of

claims 16-17 and 31-33. Support for the amendments to each of these claims can be found in the specification and claims of the priority application as originally filed.

Accordingly, no issue of new matter is created by these amendments.

Applicants respectfully request favorable consideration of this application.

If there is any fee due in connection with the filing of this Preliminary Amendment, please charge the fee to our Deposit Account 06-0916.

Respectfully submitted,

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Dated: December 20, 2001

By: 

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APPENDIX TO PRELIMINARY AMENDMENT OF DECEMBER 11, 2001

16. (Amended) A decoding system comprising:

synchronization code detecting means for detecting a synchronization code at one of a plurality of synchronization code inserting positions predetermined at periodic intervals in an [output] input code string;

demultiplexing means for demultiplexing said input code string on the basis of the position of the synchronization code detected by said synchronization code detecting means [from said input code string], to produce [a] kinds of compressed codes [code string]; and

decoding means for decoding said compressed codes [code] to output a reconstructed signal, each of the kinds of compressed codes being a variable length code

[said synchronization code detecting means detecting said synchronization code at a plurality of periodically predetermined synchronization code inserting positions in said input code string].

17. (Amended) A decoding system as set forth in claim 16, which further comprises code string transforming means for transforming a code string other than said synchronization code, which is transformed so that a [humming] Hamming distance from said synchronization code is equal to or greater than a predetermined value at said one of the plurality of synchronization code inserting positions [position] of said input code string, into [the] an original code string.

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32. (Amended) A decoding system as set forth in claim 31, which further comprises code string transforming means for transforming a code string other than said synchronization code[, which is transformed so that a humming distance] so that a Hamming distance of the transformed code string from a synchronization code[,] which has a shortest length of synchronization codes having different lengths in a part or all of added layers, is equal to or greater than a predetermined value.

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